

REMARKS

Claims 1-6 are pending in this application. By this Amendment, claims 1-6 are amended. The amendments to claims 1-6 are made solely for the sake of clarity, and are not believed to affect the scope of the claims. Support for the amendments to claims 1-6 can be found, for example, in original claims 1-6. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Rejections Under 35 U.S.C. §102**A. Caren**

The Office Action rejects claims 1 and 4-6 under 35 U.S.C. §102(b) over U.S. Patent No. 6,047,543 to Caren et al. ("Caren"). Applicants respectfully traverse the rejection.

Claim 1 recites "a catalyst for purifying exhaust gases, comprising: a catalyst support having tubular passages through which exhaust gases flow in an axial direction; a coating layer formed on a surface of the catalyst support, the coating layer being composed of a zeolite, a refractory inorganic oxide, and a first catalyst metal loaded on a surface of the refractory inorganic oxide; and a second catalyst metal loaded on at least one of a front stage part of the coating layer at an upstream end of the exhaust gas flow and a rear stage part of the coating layer at a downstream end of the exhaust gas flow" (emphasis added). Caren does not teach or suggest such a catalyst.

The Office Action asserts that Caren discloses a catalyst structure including two honeycomb bricks holding noble metal catalysts. The Office Action further asserts that the bricks of the catalyst structure of Caren are positioned so that one is upstream of the other. Notwithstanding these assertions, Caren does not anticipate and would not have rendered obvious the catalyst of claim 1.

In the catalyst of claim 1, a coating layer including a first catalyst metal is formed on a catalyst support and a second catalyst metal is loaded onto one or more parts of the coating

layer. That is, the first catalyst metal and the second catalyst metal are both provided on the same catalyst support. As the Office Action correctly points out, Caren discloses a catalytic converter including at least two separate monolithic honeycomb structures, each holding a noble metal. *See* column 3, lines 18 to 26. Nowhere does Caren teach or suggest that a first catalyst metal and a second catalyst metal should be provided on a single catalyst support.

Claim 1 further recites that the second catalyst metal is provided on at least one of a front stage part and a rear stage part of the coating layer. As indicated above, Caren does not teach or suggest employing a second catalyst metal at all, much less that the second catalyst metal should be selectively loaded on a coating layer including the first catalyst metal. By providing the second catalyst metal on at least one of a front stage part and a rear stage part of the coating layer, as recited in claim 1, it is possible to obtain a catalyst with good exhaust purifying characteristics even at low temperatures (e.g., when an engine is first started). *See* instant specification, paragraph [0015]. Specifically, hydrocarbons contained in exhaust gases at low temperatures are adsorbed by the zeolite of the coating layer of claim 1. *See* instant specification, paragraph [0032]. If the second catalyst metal is loaded on the front stage part of the coating layer (upstream), the second catalyst metal quickly rises to a catalytic activity temperature during operation and purifies hydrocarbons adsorbed by the zeolite. *See id.* If, on the other hand, the second catalyst metal is loaded on the rear stage part of the coating layer (downstream), the second catalyst metal purifies hydrocarbons released from the zeolite at a high efficiency. *See id.* If the second catalyst metal is provided on both the front and rear stage parts, the catalyst will exhibit both the effects. *See id.*

Caren does not teach or suggest the particular catalyst configuration recited in claim 1, or appreciate the benefits stemming therefrom. Accordingly, Caren does not teach or suggest each and every feature of claim 1.

Claim 1 is not anticipated by Caren. Claims 4-6 depend from claim 1 and, thus, also are not anticipated by Caren. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

B. Yamamoto

The Office Action rejects claims 1 and 3-6 under 35 U.S.C. §102(b) over U.S. Patent No. 6,047,544 to Yamamoto et al. ("Yamamoto"). Applicants respectfully traverse the rejection.

Claim 1 is set forth above. Yamamoto does not teach or suggest a catalyst as recited in claim 1.

The Office Action asserts that Yamamoto discloses a catalyst structure including an upstream unit and a downstream unit, each supporting a three-way catalyst. The Office Action further asserts that the downstream unit of the catalyst structure of Yamamoto is a monolithic substrate having a first zeolite hydrocarbon adsorbent layer and a three-way catalyst layer formed over the adsorbent layer. Notwithstanding these assertions, Yamamoto does not anticipate and would not have rendered obvious the catalyst of claim 1.

As indicated above, in the catalyst of claim 1, a coating layer including a first catalyst metal is formed on a catalyst support and a second catalyst metal is loaded onto one or more parts of the coating layer -- the first catalyst metal and the second catalyst metal are both provided on the same catalyst support. As the Office Action notes, Yamamoto discloses a exhaustion purification device including a first catalyst unit including a first three-way catalyst on a monolithic substrate, and a second catalyst unit including a second three-way catalyst. *See* column 4, lines 13 to 33. Yamamoto does not teach or suggest, however, that a first catalyst metal and a second catalyst metal should both be provided on a single catalyst support. Claim 1 further recites that the second catalyst metal is provided on at least one of a front stage part and a rear stage part of the coating layer. As with Caren, Yamamoto does not teach or suggest employing a second catalyst metal in either of the disclosed first or second

catalyst units, much less that the second catalyst metal should be selectively loaded on a coating layer including the first catalyst metal.

Yamamoto, like Caren, does not teach or suggest the particular catalyst configuration recited in claim 1, or appreciate the benefits stemming therefrom (*see* discussion in previous section). Accordingly, Yamamoto does not teach or suggest each and every feature of claim 1.

Claim 1 is not anticipated by Yamamoto. Claims 3-6 depend from claim 1 and, thus, also are not anticipated by Yamamoto. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejections Under 35 U.S.C. §103

A. Caren

The Office Action rejects claim 2 under 35 U.S.C. §103(a) over Caren. Applicants respectfully traverse the rejection.

For the reasons discussed above, Caren does not teach or suggest each and every limitation of claim 1. Accordingly, claim 1 would not have been rendered obvious by Caren. Claim 2 depends from claim 1 and, thus, also would not have been rendered obvious by Caren.

For the foregoing reasons, reconsideration and withdrawal of the rejection are respectfully requested.

B. Yamamoto

The Office Action rejects claim 2 under 35 U.S.C. §103(a) over Yamamoto. Applicants respectfully traverse the rejection.

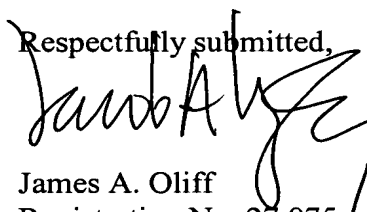
For the reasons discussed above, Yamamoto does not teach or suggest each and every limitation of claim 1. Accordingly, claim 1 would not have been rendered obvious by Yamamoto. Claim 2 depends from claim 1 and, thus, also would not have been rendered obvious by Yamamoto.

For the foregoing reasons, reconsideration and withdrawal of the rejection are respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-6 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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